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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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7590

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EXAMINER

PATEL, RAMESH B

ART UNIT

PAPER NUMBER

2121

DATE MAILED: 07/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/807,056

Applicant(s)

BONNAIN ET AL.

Examiner

Ramesh B. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-12 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-8 and 10-12 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-8 and 10-12 are presented for examination. Claims 9 and 13-18 have been withdrawn due to the restriction requirement and the applicant has elected Group I (claims 1-8 and 10-12 without traverse) filed on 5/26/2005.

2. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. The Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No.PCT/US02/29862, filed on 9/20/2002.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

5. Claim 6 is objected to because of the following informalities: claim 6, the term "characterization" should be "characterization". The applicant is request to review entire disclosure and make appropriate correction as required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Kirka et al. (US Patent 5,706,221).

As to claims 1 and 10, Kirka teaches the invention including system and a method for identifying abnormal operation of a packaging machine, the system and the method comprising: a sampling entity arranged to sample a signal issued, when in use,

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to a servo-motor, the signal corresponding to torque values of the servo-motor is taught as the fault detection unit arranged to detect faults in the position and speed of the servomotor which is obtained by monitoring signals sent from a resolver disposed on the shaft of the servomotor of the packing machine (see, abstract and figure 5 and col. 5, line 64 to col. 6, line 30 and col. 7, lines 34-53 and col. 16, lines 25-52); a spectrum analyzer for generating a spectral analysis of the sampled signal is taught as the measurements of the servomotor are sent to central processing unit for creating motion profile and further analyzing the motion profile for debugging and monitoring of the servo amplifier and possibly for detecting fault (see, figures 5 and col. 6, lines 2-30); a processing unit coupled to a storage device for storing a characterization of a mechanical element coupled to the servo-motor and corresponding to a state of operation, the characterization corresponding to at least one predetermined value for each of at least one frequency of the signal (see, abstract and figure 9 and col. 7, lines 34-53, col. 11, lines 1-11); wherein the processing unit is arranged to determine, when in use, abnormal operation of the mechanical element using the spectral analysis of the sampled signal and the characterization of the mechanical element is taught as the control system for packing machine is capable of determining abnormal or faulty operation ("The PAM 90 which may be programmed to execute any number motion profile to carry various packaging process steps..., see, col. 11 lines 1-3) (see, abstract and figures 5 and 15-41 and col. 5, line 64 to col. 6, line 30 and col. 7, lines 34-53 and col. 11, lines 1-22).

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As to claim 2, Kirka teaches the system and the method wherein the state of operation is normal operation (see, abstract and figures 1-5 and 42-43 and col. 16, line 53 to col. 17, line 18-30).

As to claims 3-5, Kirka teaches system and the method wherein the processing unit is arranged to determine an actual sampling period of the sampling unit, the actual sampling period is derived from an expected sampling period, an expected speed and an actual position of the servomotor wherein a correction factor is calculated from the actual sampling period and the expected sampling period for applying to the sampled signal (see, figures 39-41 and col. 2, lines 29-49 and col. 66, lines 24-67).

As to claim 6, Kirka teaches the system and the method wherein the characterization is learnt (see, abstract and col. 2, lines 18-49).

As to claims 7-8, Kirka teaches the system and the method wherein fuzzy logic is used to quantify the abnormal operation of the mechanical element wherein the at least one predetermined value for the each of the at least one frequency of the signal is embodied in at least one respective rule applicable, when in use, to the spectral analysis signal is taught as the control system for packing machine is capable of determining abnormal or faulty operation ("The PAM 90 which may be programmed to execute any number motion profile to carry various packaging process steps..., see,

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col. 11 lines 1-3) (see, abstract and figures 5 and 15-41 and col. 5, line 64 to col. 6, line 30 and col. 7, lines 34-53 and col. 11, lines 1-22 and col. 16, lines 25-67).

As to claims 11-12, Kirka teaches a computer program element embodied on a computer, comprising computer program means to make a computer execute the method of claim 10 is taught as the control system for packing machine is capable of determining abnormal or faulty operation ("The PAM 90 which may be programmed to execute any number motion profile to carry various packaging process steps..., see, col. 11 lines 1-3) (see, col. 5, line 64 to col. 6, line 30 and col. 11, lines 1-22).


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh B. Patel whose telephone number is 571-272-3688. The examiner can normally be reached on M-Th; 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ramesh B. Patel
Primary Examiner
Art Unit 2121

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